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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/735,768	12/16/2003	Sung-Kyung Jang	P-0498	4071

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EXAMINER

RIZK, SAMIR WADIE

ART UNIT	PAPER NUMBER
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2133

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/735,768	Applicant(s) JANG, SUNG-KYUNG	
	Examiner Sam Rizk	Art Unit 2133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 and 21-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19, 21-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.



GUY LAMARRE
PRIMARY EXAMINER

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- Response to the applicant's amendment dated 12/28/2006
- Claim 20 has been Cancelled
- Added new claim 30
- Amended claims 1-19 and 21-30 been submitted for examination
- Amended claims 1-19 and 21-30 have been rejected

Claim Objections

1. In view of the applicant-amended claims 9, 13 and 17, all objections to the claims 9,13 and 17 are withdrawn.
2. Claim 20 has been cancelled; Objection to claim 20 is moot.

Response to Arguments

3. Applicant's arguments with respect to claims 1, 21 and 22 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1,2,21 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated W. Graham US patent no. 3409889 (Hereinafter Graham).
5. In regard to claim 1, Graham teaches:

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5. In regard to claim 1, Graham teaches:

(Currently Amended) A method for compensating for synchronization errors sending a first initial synchronization message by a first device to a second device (Note: FIG. 2 1x of station x in Graham); sending a second initial synchronization message by the second device to the first device at substantially the same time as the sending of the first initial synchronization message and before the first synchronization message is received at the second device (Note: FIG. 2 1y of station y in Graham); and synchronizing the first device and the second device, compensating for synchronization errors when the first device and the second device both initiate said initial synchronizing messages at substantially the same time (Note: FIG. 3 in Graham).

6. In regard to claim 2, Graham teaches:

(Original) The method of claim 1, wherein the first device and the second device are wireless devices (Note: col. 1, line 24 in Graham).

7. Claims 21 and 22 are rejected for the same reasons as per claim 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
8. Claims 3-19, 23-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graham as applied to claim 2 above, and further in view of Kuo US patent no 6987981 (Hereinafter Kuo).

9. In regard to claim 3, Graham substantially teaches all the limitations in claim 2. However, Graham does not teach:

(Original) The method of claim 2, wherein: the first device is a user equipment device; and the second device is a universal mobile telecommunications system terrestrial access network device.

Kuo in an analogous art that teaches robust RLC reset procedure in wireless communication system teaches:

(Original) The method of claim 2, wherein: the first device is a user equipment device; and the second device is a universal mobile telecommunications system terrestrial access network device.

(Note: Figure 2, reference character (30) in Kuo)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Graham of synchronized communication system with the teaching of Kuo.

This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would

have recognized the need for robust RLC synchronization procedure.

10. In regard to claim 4, Kuo teaches:

(Currently Amended) The method of claim 1, wherein said compensating for synchronization errors comprises canceling a second the second initial synchronization message.

(Note: Figure 3, reference character (48) in Kuo)

11. In regard to claim 5, Kuo teaches:

(Original) The method of claim 4, wherein the first initial synchronization comprises first uplink information.

(Note: Figure 3, reference character (44) "UL" in Kuo)

12. In regard to claim 6, Kuo teaches:

(Original) The method of claim 5, wherein the uplink information comprises an uplink hyper frame number of the first device.

(Note: Figure 3, reference character (44) "HFN" in Kuo)

13. In regard to claim 7, Kuo teaches:

(Original) The method of claim 4, wherein the first initial synchronization message and the second initial synchronization message are RESET PDUs.

(Note: Figure 3, reference character (48) in Kuo)

14. In regard to claim 8, Kuo teaches:

(Currently Amended) The method of claim 1, wherein said compensating for synchronization errors comprises:
incrementing upload information and download information in the first device and the second device only if:

the first device sends the first initial synchronization message to the second device, wherein the first initial synchronization message comprises the upload information, and the second device is set to the upload information;
the second device sends the second initial synchronization message to the first device prior to receiving the first initial synchronization message, wherein the second initial synchronization message comprises the download information, and the first device is set to the download information;; and
the second device sends a first acknowledgment synchronization message to the first device in response the first initial synchronization message, wherein the first acknowledgement message comprises the download information, and the first device is set to the download information.

(Note: Figures 6a-6d in Kuo)

15. In regard to claim 9, Kuo teaches:

(Currently Amended) The method of claim 8, wherein incrementing upload information and download information in the first device and the second device is incrementing upload information and download information in the first device and the second device by 1.

(Note: Figure 6a, reference character (154) in Kuo)

16. In regard to claim 10, Kuo teaches:

(Original) The method of claim 8, wherein at least one of:
the uplink information comprises an uplink hyper frame number of the first device; and
the downlink information comprises a downlink hyper frame number of the second device.

(Note: Figure 3, reference characters (44) and (45) in Kuo)

17. In regard to claim 11, Kuo teaches:

(Original) The method of claim 8, wherein at least one of:
the first initial synchronization message and the second initial
synchronization message are RESET PDUs; and
the first acknowledge synchronization message and the second
acknowledge synchronization are RESET ACK PDUs.

(Note: Figure 4, reference characters (68), (72) and (82) in Kuo)

18. In regard to claim 12, Kuo teaches:

(Currently Amended) The method of claim 1, wherein said
compensating for synchronization errors comprises:
incrementing only the upload information in the second device and
incrementing only the downlink information in the first device only if:
the first device sends the first initial synchronization message to the
second device, wherein the first initial synchronization message
comprises the upload information, and the second device is set to the
upload information;
the second device sends the second initial synchronization message to
the first device prior to receiving the first initial synchronization
message, wherein the second initial synchronization message
comprises the download information, and the first device is set to the
download information;
the second device sends a first acknowledgment synchronization
message to the
first device in response the first initial synchronization message, wherein
the first acknowledgement message comprises the download
information, and both the uplink
information and the downlink information set in the second device are
incremented; and
the first device sends a second acknowledgment synchronization
message to the second device in response the second initial
synchronization message, wherein the second acknowledgement
message comprises the upload information, and both the uplink
information and the downlink information set in the first device are
incremented;
the first device is set to the download information upon receipt of the
first acknowledgment synchronization message; and

the second device is set to the uplink information upon receipt of the second acknowledgment synchronization message.

(Note: Figures 6a-6d in Kuo)

19. Claims 13 and 17 are rejected for the same reasons as per claim 9.
20. Claims 14, 18 and 23 are rejected for the same reasons as per claim 10.
21. Claims 15, 19 and 26 are rejected for the same reasons as per claim 11.
22. In regard to claim 16, Kuo teaches:

(Currently Amended) The method of claim 1, wherein said compensating for synchronization errors comprises:
incrementing only the upload information in the second device and incrementing only the downlink information in the first device only if: the first device sends the first initial synchronization message to the second device, wherein the first initial synchronization message comprises the upload information, and the second device is set to the upload information;
the second device sends the second initial synchronization message to the first device prior to receiving the first initial synchronization message, wherein the second initial synchronization message comprises the download information, and the first device is set to the download information;
both the uplink information and the downlink information set in the second device are incremented, the second device sends a first acknowledgment synchronization message to the first device in response the first initial synchronization message, and wherein the first acknowledgement message comprises the incremented download information set in the second device; and
both the uplink information and the downlink information set in the first device are incremented, the first device sends a second acknowledgment synchronization message to the second device in response the second initial synchronization message, wherein the second acknowledgement message comprises the incremented upload information set in the first device, and;
the first device is set to the download information upon receipt of the first acknowledgment synchronization message; and

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the second device is set to the uplink information upon receipt of the second acknowledgment synchronization message.

(Note: Figures 6a-6d in Kuo)

- 23. Claim 24 is rejected for the same reasons as per claim 4.
- 24. Claim 25 and 28 are rejected for the same reasons as per claim 8.
- 25. Claims 27 and 29 are rejected for the same reasons as per claim 16.
- 26. Claim 30 is rejected for the same reasons as per claim 30.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Rizk whose telephone number is (571)-272-8191. The examiner can normally be reached on M-F.8-5.

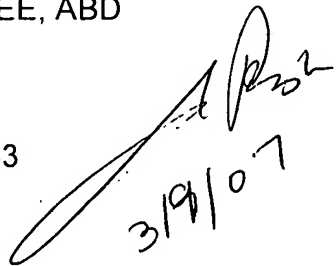
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571)272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sam Rizk, MSEE, ABD

Examiner

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Handwritten signature of Sam Rizk and the date 3/19/07.